CLAIMS

- 1. Film-shaped or wafer-shaped pharmaceutical preparation for administering active substances, characterized in that said preparation contains at least one matrix-forming polymer which has at least one active substance and at least one carbon dioxide-forming substance dissolved or dispersed therein.
- 2. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 1, characterized in that said pharmaceutical preparation is suitable for administration of active substance(s) via the oral mucosa.
- 3. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 1 or 2, characterized in that the carbon dioxide-forming substance or at least one of the carbon dioxide-forming substances is/are selected from the group comprising sodium hydrogencarbonate, sodium carbonate, potassium carbonate and potassium hydrogen carbonate.
- 4. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that the carbon dioxide-forming substance is contained in the pharmaceutical preparation in an amount of 2 to 50%-wt, preferably 5 to 30%-wt, and with particular preference 7 to 20%-wt, relative to the pharmaceutical preparation.
- 5. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it contains an acid component.
- 6. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 5, characterized in that the acid compo-

nent is selected from the group comprising citric acid, tartaric acid, adipic acid, malic acid, ascorbic acid, succinic acid, acetic acid, fumaric acid, metatartaric acid, lactic acid and phosphoric acid.

- 7. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 5, characterized in that the acid component is selected from the group comprising sodium dihydrogenphosphate, disodium hydrogenphosphate, potassium hydrogenphosphate and potassium dihydrogenphosphate.
- 8. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it contains at least one permeation enhancer and/or at least one substance stimulating the blood flow.
- 9. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 8, characterized in that the permeation enhancer is selected from the group comprising saturated or unsaturated fatty acids, hydrocarbons, straight-chain or branched fatty alcohols, dimethyl sulfoxide, propylene glycol, decanol, dodecanol, 2-octyldodecanol, glycerol, isopropylidene glycerol, transcutol (= diethyleneglycolmonoethyl ether), DEET (= N,N-diethyl-m-tolueneamide), solketal, ethanol or other alcohols, menthol and other essential oils or components of essential oils, lauric acid diethanolamide, D-alpha-tocopherol and dexpanthenol.
- 10. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 8, characterized in that the substance stimulating the blood flow is selected from the group comprising menthol, eucalyptol, ginkgo extract, geranium oil, camphor, spearmint oil, oil of juniper, and rosemary.

- 11. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it disintegrates within 15 min, preferably within 3 min, and particularly preferably within 60 seconds, after introduction into an aqueous medium.
- 12. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that the matrix-forming polymer(s) is/are selected from the group comprising polyvinyl alcohol, cellulose derivatives, starch and starch derivatives, gelatine, polyvinyl pyrrolidone, gum arabic, pullulan, acrylates, polyethylene oxide, and copolymers of methyl vinyl ether and maleic acid anhydride, with the group of the cellulose derivatives preferably comprising hydroxypropylmethyl cellulose, hydroxypropyl cellulose, sodium carboxymethyl cellulose, methyl cellulose, hydroxyethyl cellulose and hydroxypropylethyl cellulose.
- 13. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of claims 1 to 10, characterized in that the matrix-forming polymer(s) is/are selected from the group comprising cellulose ether, preferably ethyl cellulose, as well as polyvinyl alcohol, polyurethane, polymethacrylate, polymethyl methacrylate, and derivatives and copolymerisates of the aforementioned polymers.
- 14. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that the pharmaceutical preparation contains an auxiliary substance imparting mucoadhesive properties to the preparation.
- 15. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 14, characterized in that the auxiliary substance is selected from the group comprising polyacrylic

acid, carboxymethyl cellulose, hydroxymethyl cellulose, methyl cellulose, tragacanth, alginic acid, gelatine and gum arabic, or a mixture thereof.

- 16. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 14, characterized in that the pharmaceutical preparation has a bilayer or multilayer structure, with only the layer or layers which is/are facing the oral mucosa, respectively which is/are in contact with the oral mucosa, being rendered mucoadhesive.
- 17. Film-shaped or wafer-shaped pharmaceutical preparation according to claim 16, characterized in that the non-mucoadhesive layers have a lower permeability for the active substance, respectively the active substances.
- 18. Film-shaped or wafer-shaped pharmaceutical preparation according to any of the preceding claims, characterized in that it is flat-shaped, with the thickness of this flat-shaped preparation preferably lying between 0.3 g/cm³ and 1.7 g/cm³, with particular preference between 0.5 g/cm³ and 1.5 g/cm³, and most preferably between 0.7 g/cm³ and 1.3 g/cm³.
- 19. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that its total thickness is 5 µm to 10 mm, preferably 30 µm to 2 mm, and with particular preference 0.1 mm to 1 mm.
- 20. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it has a round or ellipsoid or oval shape, or a triangular, quadrangular or polygonal shape, or an irregular rounded shape.

- 21. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it is present as a solidified foam, the density of this solidified foams preferably being between 0.01 g/cm³ and 0.8 g/cm³, with particular preference between 0.08 g/cm³ and 0.4 g/cm³, and with greatest preference between 0.1 g/cm³ and 0.3 g/cm³.
- 22. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that the polymer portion of the matrix amounts to at least 3%-wt. and maximally 98%-wt., preferably 7 to 80%-wt., with particular preference 20 to 50%-wt., each value being relative to the entire preparation.
- 23. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it contains at least one auxiliary substance, said auxiliary substance(s) being selected from the group comprising fillers, colourants, disintegrants, emulsifiers, plasticizers, sweeteners, preserving agents, stabilisers, antioxidants and flavouring agents.
- 24. Film-shaped or wafer-shaped pharmaceutical preparation according to any one of the preceding claims, characterized in that it contains at least one flavouring agent and/or at least one sweetener and/or at least one plasticizer.
- 25. Use of the film-shaped or wafer-shaped pharmaceutical preparation according to any one of claims 1 to 24 for administration of active substance(s), preferably at least one active substance which has a bitter taste.
- 26. Use of the film-shaped or wafer-shaped pharmaceutical preparation according to any one of claims 1 to 24 for administration of active substance(s) to an oral mucosa of a

human or animal organism, preferably for oral administration.

- 27. Process for oral administration of pharmaceutically active substance(s) having a bitter taste, characterized by applying a film-shaped or wafer-shaped pharmaceutical preparation which, in addition to the active substance, contains a carbon dioxide-forming substance which upon access of aqueous media releases carbon dioxide.
- 28. Process according to claim 27, characterized by applying pharmaceutical preparations which are capable of disintegrating in aqueous media.
- 29. Process according to claim 27 or 28, characterized by applying a mucoadhesive pharmaceutical preparation to the surface of the oral mucosa of said organism.